

# TSD File Inventory Index

Date: November 30, 2006

Initial: D.M. Huerfano

Facility Name: <u>Altrachem, Inc.</u>		
Facility Identification Number: <u>16 D 981 950 272</u>		
<b>A.1 General Correspondence</b>		<b>B.2 Permit Docket (B.1.2)</b>
<b>A.2 Part A / Interim Status</b>		<b>.1 Correspondence</b>
<b>.1 Correspondence</b>		<b>.2 All Other Permitting Documents (Not Part of the ARA)</b>
<b>.2 Notification and Acknowledgment</b>		<b>C.1 Compliance - (Inspection Reports)</b>
<b>.3 Part A Application and Amendments</b>		<b>C.2 Compliance/Enforcement</b>
<b>.4 Financial Insurance (Sudden, Non Sudden)</b>		<b>.1 Land Disposal Restriction Notifications</b>
<b>.5 Change Under Interim Status Requests</b>		<b>.2 Import/Export Notifications</b>
<b>.6 Annual and Biennial Reports</b>		<b>C.3 FOIA Exemptions - Non-Releasable Documents</b>
<b>A.3 Groundwater Monitoring</b>		<b>D.1 Corrective Action/Facility Assessment</b>
<b>.1 Correspondence</b>		<b>.1 RFA Correspondence</b>
<b>.2 Reports</b>		<b>.2 Background Reports, Supporting Docs and Studies</b>
<b>A.4 Closure/Post Closure</b>		<b>.3 State Prelim. Investigation Memos</b>
<b>.1 Correspondence</b>		<b>.4 PFA Reports</b> <u>D. 1.4</u>
<b>.2 Closure/Post Closure Plans, Certificates, etc</b>		<b>D. 2 Corrective Action/Facility Investigation</b>
<b>A.5 Ambient Air Monitoring</b>		<b>.1 RFI Correspondence</b>
<b>.1 Correspondence</b>		<b>.2 RFI Workplan</b>
<b>.2 Reports</b>		<b>.3 RFI Program Reports and Oversight</b>
<b>B.1 Administrative Record</b>		<b>.4 RFI Draft /Final Report</b>

Tel. 1

.5 RFI QAPP		.7 Lab data, Soil Sampling/Groundwater	
.6 RFI QAPP Correspondence		.8 Progress Reports	
.7 Lab Data, Soil-Sampling/Groundwater		D.5 Corrective Action/Enforcement	
.8 RFI Progress Reports		.1 Administrative Record 3008(h) Order	
.9 Interim Measures Correspondence		.2 Other Non-AR Documents	
.10 Interim Measures Workplan and Reports		D.6 Environmental Indicator Determinations	
D.3 Corrective Action/Remediation Study		.1 Forms/Checklists	
.1 CMS Correspondence		E. Boilers and Industrial Furnaces (BIF)	
.2 Interim Measures		.1 Correspondence	
.3 CMS Workplan		.2 Reports	
.4 CMS Draft/Final Report		F Imagery/Special Studies (Videos, photos, disks, maps, blueprints, drawings, and other special materials.)	
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.6 CMI Correspondence		.9 Environmental Justice	

Note: Transmittal Letter to Be Included with Reports.  
Comments: \_\_\_\_\_

**Determination: Not subject to CA, but follow up**

**PA/VSİ Or RFA FILE REVIEW CHECKLIST**

Facility Name: Altra Chem Enterprises

EPA ID: ILD 981 950 272\_\_

Address: 18B Henderson St. Joliet, Will Co., IL

Name of Reviewer: Maureen McHugh\_\_\_\_\_

Date of Review: 12/01/08\_\_\_\_\_

1	Yes	No	Is this a one folder site?
2	Yes	No	Are there Superfund files for this site?
3	Yes	No	Did you Read the Executive Summary?
			There are: <u>  5  </u> SWMUs and <u>  1  </u> AOCs at this site.
4	Yes	No	Did you review the regulatory history?
5	Yes	No	Does the facility have interim status or a permit?
			This facility is a: <u>      </u> SQG, <u>      </u> LQG, or <u>      </u> Less than 90 day.
6	Yes	No	Was the Facility closed per RCRA?
			If Yes, was the closure: <u>      </u> CC, or <u>      </u> CIP.
7	Yes	No	Are there documented (historical) releases? Briefly describe on Page 2.
8	Yes	No	Were there releases identified during the inspection? Briefly describe on Page 2.
9	Yes	No	Do you agree with the Conclusions and Recommendations?
			If No, briefly describe on Page 2.

As a result of your review of the PA/VSİ or RFA file, please classify this site as:

       No further corrective action recommended or warranted: These are sites that closed the regulated units and any other SWMUs or AOCs at the site did not warrant any further corrective action (no historic releases or evidence of releases observed during the Visual Site Inspection).

       Further Action Required: Soil or sediment sampling or groundwater sampling or monitoring or any type of investigation that was recommended in the report in response to a documented or observed release at any SWMU or AOC and where such investigation, whether being addressed during the inspection or after, does not have the necessary documentation in the facility record files.

       More Information Needed: There is no RFA, PA/VSİ or RCRA closure information available.

## PA/VSİ Or RFA FILE REVIEW CHECKLIST

### Notes

Non-generator & not subject to CA, according to RCRAInfo.

Briefly describe any documented (historical) releases for any SWMU or AOC recorded in the report. For each release, please identify the SWMU or AOC and a one or two line description of release.

There was a fire in 1987 which destroyed the facility and damaged 140 drums of special waste, releasing hazardous constituents to the soil.

The loading and unloading areas were constructed without secondary containment and some drums and pallets of off-specification commercial product were observed to be damaged at the Special Waste Drum Area (SWMU2)

Briefly describe any releases observed during the inspection for any SWMU or AOC recorded in the report. For each release, please identify the SWMU or AOC and a one or two line description of release.

### PA/VSİ Recommendations

The PA/VSİ recommended soil sampling at the Former Facility Fire Debris Area (SWMU1) and the Special Waste Drum Storage Area (SWMU2) to determine the nature and extent of possible soil contamination. It also recommended verification of closure of the Leaded Fuel UST (AOCA) and sampling to determine the nature and extent of contamination if closure cannot be verified. There were no incidents in the LUST database.



**PRELIMINARY ASSESSMENT/VISUAL SITE INSPECTION REPORT  
FOR  
ALTRACHEM, INC.  
18 HENDERSON AVENUE  
JOLIET, ILLINOIS  
EPA ID NO. ILD981950272**

**Submitted to:**

**Mr. Gerald Phillips  
U.S. Environmental Protection Agency  
Region 5, D-8J  
77 West Jackson Boulevard  
Chicago, Illinois 60604**

**Submitted by:**

**TechLaw, Inc.  
20 North Wacker Drive, Suite 1260  
Chicago, Illinois 60606**

**EPA Work Assignment No.  
Contract No.  
TechLaw, Inc. WAM  
Telephone No.  
EPA WAM  
Telephone No.**

**R05052  
68-W4-0006  
Mr. Rob Young  
312/345-8966  
Mr. Gerald Phillips  
312/886-0977**

**May 5, 1998**



D-8J

May 15, 1998

Ms. Patricia Brown-Derocher  
Regional Manager  
TechLaw, Inc.  
20 North Wacker Drive  
Suite 1260  
Chicago, Illinois 60606


Reference: contract No. 68-W4-00006; Work Assignment R05052

Dear Ms. Brown-Derocher:

Thank you for your May 5, 1998, letter regarding the Altrachem, Inc. facility (ILD 981 950 272) located in Joliet, Illinois. The report is adequate and I have concluded that the submission along with the scoring sheets will constitute the final deliverable for the facility. Please provide a copy of the final report to the appropriate IEPA and facility contacts.

Do not hesitate to call me at (312) 886-0977 should you have additional questions or need additional clarification.

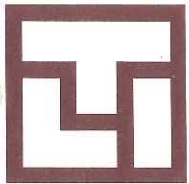
Sincerely,

  
Gerald W. Phillips  
Corrective Action Process Manager  
Waste, Pesticides and Toxics Division

cc: Bill Wesley, TechLaw  
F. Norling, U.S. EPA







**TECHLAW INC.**

20 NORTH WACKER DRIVE, SUITE 1260, CHICAGO, IL 60606

PHONE: (312) 578-8900

FAX: (312) 578-8904

RZ2.R05052.01.ID.165

May 5, 1998

Mr. Gerald Phillips  
U.S. Environmental Protection Agency  
Region 5 D-8J  
77 West Jackson Boulevard  
Chicago, Illinois 60604

Reference: EPA Contract No. 68-W4-0006; Work Assignment No. R05052; Environmental  
Priorities Initiative (EPI) Assessments; Altrachem, Inc., Joliet, Illinois; EPA ID  
No. ILD981950272; PA/VSI Report and NCAPS Scoring Report; Task 04  
Deliverable

Dear Mr. Phillips:

Please find enclosed the Preliminary Assessment/Visual Site Inspection (PA/VSI) Report and the NCAPS Scoring Report for the referenced facility. The NCAPS total migration score for the facility is 25.76 with a high groundwater score (42.42), surface water score (18.87), and on-site score (21.43). These scores are reflective of site conditions which include documented releases of hazardous constituents to soil during a facility fire in 1987.

Should you have any questions or require additional information, please feel free to contact me at (312) 345-8963 or Mr. William Wesley at (312) 345-8955.

Sincerely,

Patricia Brown-Derocher  
Regional Manager

Enclosure

cc: F. Norling, EPA Region 5, w/o attachment  
W. Jordan/Central Files  
W. Wesley  
Chicago Central Files

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**PRELIMINARY ASSESSMENT/VISUAL SITE INSPECTION REPORT  
FOR  
ALTRACHEM, INC.  
18 HENDERSON AVENUE  
JOLIET, ILLINOIS  
EPA ID NO. ILD981950272**

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Appendix B	Visual Site Inspection Field Notebooks
Appendix C	Facility Location and Layout with SWMU/AOC Locations





## I. EXECUTIVE SUMMARY

The RCRA Facility Assessment (RFA) is the first step in implementing the corrective action provisions of the 1984 Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act (RCRA). The purpose of the RFA is to identify environmental releases or potential releases from Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) that may require corrective action by the facility owner. A Preliminary Assessment/Visual Site Inspection (PA/VSI) is a form of an RFA suitable for implementing the corrective action provisions of HSWA. This PA/VSI Report constitutes the reporting requirement for the RFA at the Altrachem, Inc. (Altrachem) facility in Joliet, Illinois.

A Preliminary Assessment (PA) of the available State of Illinois file materials was conducted to familiarize TechLaw, Inc. (TechLaw) with past compliance history, evidence of past releases, potential migration pathways, potential for exposure to any released hazardous constituents, closure methods and dates, citizen complaints, manufacturing processes, and waste management practices at the Altrachem facility.

On December 16, 1997 TechLaw performed a Visual Site Inspection (VSI) of the Altrachem facility to identify and characterize SWMUs and AOCs. TechLaw personnel were assisted during the VSI by Mr. William Edmonds, owner and operator of the Altrachem facility. Photographs were taken during the VSI and are included in Appendix A, VSI Field Notebooks are included in Appendix B, and a facility location map and layout showing SWMU/AOC locations are presented in Appendix C.

A total of five SWMUs and one AOC were identified and are described in detail in Sections III and IV of this Report. The Altrachem facility solidifies and bulks liquid, semi-solid, and solid special waste from 55-gallon drums into 20-cubic yard roll-off containers. In addition, former operations have included the separation and processing of oily-water wastes. In 1987, a fire destroyed the original facility operations and damaged approximately 140 drums and a 20-cubic yard roll-off of special waste containing hazardous constituents. Some wastes may have met the criteria for listed, hazardous waste. However, the facility claimed that all records pertaining to waste management prior to 1987 were destroyed in a fire that occurred at the facility in 1987. Thus, documentation of waste constituents managed by the facility prior to 1987 was not available from the facility nor was located in the State of Illinois file material. The facility fire debris was removed in 1987. However, no corrective action or soil sampling were performed at the facility to confirm the absence of release of hazardous constituents to soil. Thus, the Former Facility Fire Debris Area (SWMU 1) is characterized with a high release potential.

The Special Waste Drum Storage Areas (SWMU 2) are permitted to store up to 990 drums of special waste at one time and has processed up to 6,200 drums of special waste in a single year. This unit was constructed with no secondary containment in drum loading/unloading areas, and drums and pallets of off-specification commercial product stored in this area were observed to be damaged during the VSI. Thus, the unit is characterized with a high release potential.

During the VSI, a former leaded fuel pump area was observed on the southeast corner of the facility property. Mr. Edmonds stated to TechLaw that a leaded fuel underground storage tank (UST) had been removed from the area. However, there was no visual evidence to suggest that the UST had been removed, and file material did not indicate that UST closure had been undertaken. Thus, the Leaded Fuel UST (AOC A) is characterized with a moderate release potential as the age and materials of construction are unknown, and there is no record of UST closure.

## II. SITE DESCRIPTION

The Altrachem facility is located at 18 Henderson Avenue in an industrial and residential area in Joliet, Illinois (Appendix C). The facility was originally a foundry which operated for an unknown period of time until 1960, when the foundry ceased operations. Gardner Investment Company purchased the facility property in 1960. Altrachem operations began on the facility site in 1982 under the name of Edmonds Enterprises. The Edmonds Enterprises business was owned and operated by Mr. William H. Edmonds, and the facility site at 18 Henderson Avenue, on which Edmonds Enterprises operated, was leased from the Gardner Investment Group.

In 1987, a fire destroyed the main Edmonds Enterprises building. Gardner Investment Group sold the facility property to William Edmonds in November 1988. Mr. Edmonds changed the name of the business to Altrachem, Inc., although the facility operations remained the same as the former Edmonds Enterprises facility. At the time of the VSI, Mr. Edmonds stated that he was in the process of obtaining financial resources to re-build various special waste processing operations on the facility property. Currently, the facility employs two people, Mr. Edmonds and a laborer.

The facility consists of a 2.8 acre property which is currently secured with a chain-linked fence and a locked gate. A former foundry building of approximately 3,500 square-feet is located on the northwest corner of the property and is currently used by Altrachem for storage and maintenance activities. The former Edmonds Enterprises building, which consisted of a 4,800 square-foot structure with a concrete floor, was destroyed in the 1987 fire. However, the steel I-beam structural components of the building and the concrete floor remain on the property. In addition, a small maintenance building of approximately 1,000 square-feet is located on the south boundary of the facility property and is used to store equipment and perform minor vehicle maintenance.

The Altrachem facility, including the former Edmonds Enterprises operations, operates as an IEPA-permitted non-hazardous, special waste recycling and treatment facility under Operating Permit Number 1982-30-OP. The special wastes handled by this facility are addressed under 35 IAC 808 of the Illinois Environmental Protection Agency (IEPA) regulations. From 1982 to 1987, the facility operated a used oil separation unit which settled and decanted various oily-water wastes in 4,800 gallon steel, above-ground storage tanks (ASTs). Wastewater and associated sludge from this process were accumulated in one, 4,800 gallon AST, while the oil fraction was accumulated in a separate 4,800 gallon AST. According to Mr. Edmonds, the wastewater tanks were destroyed in the 1987 fire, although three ASTs were on-site during the VSI (see Former Oil Separation ASTs [SWMU 4]). Since 1986, the facility has operated by bulking liquid, semi-solid, and solid special wastes into 20-cubic yard roll-off containers for off-site transport and disposal as special waste.

Special wastes are received at the Altrachem facility in 55-gallon drums, various size pails, or boxed on wooden pallets. Since 1986, the facility has managed the following special wastes:

- Water-based paints, inks, sealants, adhesive sludges;
- Paper product manufacturer wastes;
- Catch basin, grease trap, and food wastes;
- Wastes from cleaning tanks, equipment, and structures;
- Wastes from cooling system flushing and cleaning;
- Wastes from boiler blow-down and back-flushing;
- Spent drilling and cutting fluids;
- Dust collector wastes from air pollution control equipment;
- Contaminated soils from spills of non-hazardous waste products; and,
- Off -specification and scrap commercial products including detergents, latex paints, adhesives, and sealants.

Solid, special wastes are bulked directly into roll-off containers through the transfer of material from drums or boxes into the roll-off containers. Ozinga Transportation Systems, Inc., Matteson, Illinois, has been the facility's primary special waste hauler, while Landon Lakes Landfill, Chicago, Illinois, has been the facility's primary special waste disposal landfill.

Empty drums from bulking are kept for recycling, while cardboard, wooden pallets, and associated packaging material are discarded or recycled (see Photo 14). Scrap metal, including damaged drums and drum bands, is accumulated in a 20-cubic yard Scrap Metal Roll-Off Container (SWMU 5) which is periodically picked-up by a scrap metal recycler.

Since the facility fire in 1987, bulking has been the only process which has occurred at the facility. This process generates approximately five, 20-cubic yard roll-off containers of special waste per month. At the time of the VSI, the facility was storing 400 drums of special waste in the Special Waste Drum Storage Areas (SWMU 2). Mr. Edmonds stated that the permit capacity for the facility is 990 drums.

In June 1986, the Altrachem facility was permitted by the IEPA to install a non-hazardous, special waste treatment system to solidify non-hazardous, liquid, special waste with fly ash, cement kiln dust, and lime flue dust. However, it is unclear whether the system was operational before the January 1987 fire which destroyed the building in which it would have been located, and the unit was not present on the facility property during the VSI.

According to the IEPA permit for the facility, all special wastes are to be accompanied with manifests and analytical data documenting hazardous constituent levels of the wastes. No characteristically-hazardous wastes could be accepted by the facility under their permit. In addition, no other RCRA-listed wastes could be accepted or placed on the facility property under their IEPA permit.

During the VSI, Mr. Edmonds stated that the facility has never received any RCRA-regulated hazardous waste. All material has been tested before being brought on-site with analytical data being reviewed by Mr. Edmonds. This information, however, is not consistent with the facility's notification of hazardous waste activities with U.S. EPA Region 5. On January 31, 1986, U.S. EPA Region 5 received a notification of hazardous waste activity for the Altrachem facility. This notification listed the Altrachem facility as a hazardous waste generator, a marketer of hazardous waste fuel (to other marketers), and a generator of off-specification used oils (marketing to other burners and marketers). The notification listed the following hazardous wastes which would be managed by the Altrachem facility: D001, D002, D003, F001, F001, F003, F004, F005, K049, K048, K050, K051, K087, K052, U002, U031, U039, U019, U220, U159, U051, U052, U055, U056, U057, U074, U088, U102, U092, U110, U001, and U117.

On November 14, 1986, Altrachem resubmitted to U.S. EPA a hazardous waste notification which identified the facility as a TSD with regard to hazardous waste fuels, in addition to the other activities which were identified in the January 31, 1986 notification. Subsequently on August 14, 1987, Altrachem provided U.S. EPA Region 5 with another notification of hazardous waste activity which was revised from the earlier notifications (January 31, 1986; June 4, 1986). This notification stated that the facility notified as a TSD as the facility planned to enter into a joint venture with another company under which the Altrachem facility would be used to accept, blend, store, and market hazardous waste fuels. However, these plans were never enacted and a RCRA Part A Permit application was never submitted to U.S. EPA. The August 14, 1987 letter states that the facility engaged only in activities regulated by RCRA under 40 CFR Part 266, Subpart D for hazardous waste fuel generator/marketer and Subpart E for specification and off-specification used oil marketers. However, the August 14, 1987 re-notification by Altrachem still lists the facility as a hazardous waste generator, a marketer of hazardous waste fuel to other marketers, a used oil generator marketing to burners, and an off-specification used oil fuel marketer. This notification also lists RCRA-regulated wastes (D001, F001, F002, F003, F005) as being managed by the facility, although the IEPA special waste permit (No. 1982-30-OP) does not state that the facility is permitted to receive these wastes.

During the VSI, a former leaded fuel pump area was observed on the southeast corner of the facility property. Mr. Edmonds stated to TechLaw that a leaded fuel underground storage tank (UST) had been removed from the area (see Leaded Fuel UST, AOC A). However, there was no visual evidence to suggest that the UST had been removed, and file material did not indicate that UST closure had been undertaken.

During the VSI, Mr. Edmonds informed TechLaw that the property was formerly used as a foundry. Mr. Edmonds stated to TechLaw that investigations into possible soil contamination from the former foundry operations were undertaken by the Department of Energy (DOE) and that the DOE found no soil contamination. However, the available IEPA file material did not contain any information regarding the soil sampling, and no file information regarding the foundry was provided by Mr. Edmonds to TechLaw during the VSI.

### Regulatory History

In July 1982, Altrachem submitted a permit application to IEPA to develop a waste management facility. The treatment process consisted of decanting oily-water mixtures with the resultant wastewater being transported off-site for disposal and the oil being recycled. The Altrachem facility was apparently granted its permit to develop its oily-water waste treatment facility sometime in the summer of 1982. However, the IEPA file material does not indicate the exact date. On October 11, 1982, Altrachem requested that mineral spirits, Stoddard solvent, naptha, and kerosene to be added to their waste management facility permit.

On September 22, 1983, the IEPA inspected Altrachem to determine the current status of the oily-water waste separation operations at the facility. Mr. Edmonds informed the IEPA during this inspection that the facility had not yet accepted oily-water wastes for processing.

On December 27, 1983, the IEPA inspected Altrachem to determine the current status of the oily-water waste separation operations at the facility. Again, Mr. Edmonds informed the IEPA that the facility had not yet accepted oily-water wastes for processing.

In March 1985, Altrachem submitted another application to IEPA to modify their oily-water separation operations at the facility. The modification stated that the wastes to be treated at Altrachem would undergo laboratory analysis to determine that the wastes were non-hazardous. Wastes which were requested to be accepted included lubricating oils, gear and motor oils, light-weight drawing oils, machine oils, cutting oils, oily water wastes, hydraulic oils, mineral oils, mineral spirits and high flash naphthas, and other non-hazardous solvents.

On April 11, 1985, the IEPA informed Altrachem that the facility was required to submit a closure plan for the site as the modification to the facility's permit was received after March 1, 1985. The closure plan was required to outline the procedures which would be undertaken when the facility ceased operations in the future.

On April 18, 1985, the IEPA inspected the facility to determine the current status of the oily-water waste separation operations at the facility. Once again, Mr. Edmonds informed the IEPA that the facility had not yet accepted oily-water wastes for processing.

On April 23, 1985 Altrachem submitted a closure plan to the IEPA. This closure plan stated once the facility ceased operations, all wastes stored at the facility would be removed from the site to a permitted treatment-storage-disposal (TSD) facility, and all process equipment would be cleaned and removed from the site. The closure plan stated that closure of the Altrachem facility was expected to occur in the year 2000.

On May 10, 1985, the IEPA notified Altrachem that the Agency had approved the facility's request to modify its original permit application to install two, 4,800 gallon oil-water separation units and two, 4,800 gallon storage tanks. This notification stated that the facility would be permitted to accept used or waste oils considered to be non-hazardous, special wastes by the IEPA. These wastes were to be limited to rolling oils, kerosene, mineral spirits and high flash naphthas, lubricating oils, light-weight drawing oils, machine oils, cutting oils, coolant oils, mineral oils, and quenching/heat-treating oils.

On July 11, 1985, the IEPA granted another modification to Altrachem's permit. This modification allowed for the installation of a shredder and associated piping and liquid collection system to shred non-hazardous, commercial products including soaps, detergents, shampoos, cleaners, latex paints, and shaving creams.

On February 10, 1986 the IEPA granted an additional modification to Altrachem's permit. This modification allowed the bulking of non-hazardous, aqueous special wastes into transport tankers and the bulking of non-hazardous, semi-solid special wastes into roll-off containers. The non-hazardous, special wastes were to be limited to water-based paints, food processing waste, water-based ink wastes, grease trap wastes, aqueous wastes from parts cleaning, spent drilling fluids, sealants and adhesive waste, scrap and off-specification rubber/plastic, and contaminated soils from spills of non-hazardous wastes.

On July 14, 1986, Altrachem submitted a supplemental permit application to accept specific, non-hazardous, special wastes on a generic permit basis. The facility requested to receive these wastes for the purposes of bulking/transfer to off-site treatment or disposal facilities and for on-site product destruction through shredding. This supplemental permit application detailed the analytical criteria which would be required of incoming wastes to insure that the wastes did not exhibit levels of hazardous constituents which would qualify the wastes as hazardous.

On January 31, 1986, U.S. EPA Region 5 received a notification of hazardous waste activity for the Altrachem facility. This notification listed the Altrachem facility as a hazardous waste generator, a marketer of hazardous waste fuel (to other marketers), and a generator of off-specification used oils (marketing to other burners and marketers). The notification listed the following hazardous wastes: D001, D002, D003, F001, F001, F003, F004, F005, K049, K048, K050, K051, K087, K052, U002, U031, U039, U019, U220, U159, U051, U052, U055, U056, U057, U074, U088, U102, U092, U110, U001, U117. The notification is signed and dated January 28, 1986 by Mr. Brock Reinhard, Vice President of Altrachem.

On June 4, 1986, U.S. EPA notified the Altrachem facility that the January 31, 1986 notification was incomplete. On November 14, 1986, Altrachem resubmitted the hazardous waste notification which included the facility as a TSD with regard to hazardous waste fuels in addition to the other activities which were identified in the January 31, 1986 notification. The June 4, 1986 Altrachem hazardous waste notification was received by IEPA-Division of Land Pollution Control (DLPC) on November 25, 1986.

On January 22, 1987, Altrachem notified the IEPA-DLPC that a fire had destroyed the facility on January 13, 1987. The notification to the IEPA stated that, at the time of the fire, 140 full drums of non-hazardous waste and 20-cubic yards of special waste were present on the site. During the VSI, Mr. Edmonds supplied TechLaw with photocopies of photographs which had been taken of the facility following the January 13, 1987 fire (Photos 1, 2, 3, 4, 5).

On January 29, 1987, Altrachem again notified the IEPA-Division of Air Pollution Control (DAPC) of the January 13, 1987 fire. This notification stated that all equipment at the facility had been destroyed.

On July 16, 1987, the IEPA notified Altrachem that the facility must provide for RCRA closure of the facility. This notification identified the Altrachem facility as a RCRA interim status facility.

On August 14, 1987, the Altrachem facility responded to IEPA concerning the July 16, 1987 IEPA notification. In this response, Altrachem claimed the facility was not RCRA-regulated TSD and was not seeking a permit. The response stated that the Altrachem facility was permitted through the IEPA as a non-hazardous, special waste recycling and treatment facility under Operating Permit Number 1982-30-OP. The response stated that the facility did not file for RCRA interim status and claimed that the only activity at the facility which was subject to RCRA regulations was the generation/marketing of hazardous waste fuels and off-specification used oils.

On August 14, 1987, Altrachem provided U.S. EPA Region 5 with a notification of hazardous waste activity which was revised from the earlier notifications (January 31, 1986; June 4, 1986). This notification stated that the facility notified as a TSD as the facility had planned to enter into a joint venture with another company in which the Altrachem facility would be used to accept, blend, store, and market hazardous waste fuels. However, these plans were never enacted and a RCRA Part A Permit application was never submitted to U.S. EPA. The August 14, 1987 letter states that the facility engages only in activities regulated by RCRA under 40 CFR Part 266, Subpart D for hazardous waste fuel generator/marketer and Subpart E for specification and off-specification used oil marketers. The August 14, 1987 re-notification by Altrachem lists the facility as a hazardous waste generator, a marketer of hazardous waste fuel to other marketers, a used oil generator marketing to burner, and a specification used oil fuel marketer. This notification lists the following hazardous wastes: D001, F001, F002, F003, and F005.



On June 16, 1992, the IEPA inspected the Altrachem facility. The purpose of the compliance inspection was to determine the facility's compliance status. The inspection revealed no compliance problems with respect to RCRA.

On January 22, 1993, the IEPA inspected the Altrachem facility. The purpose of the compliance inspection was to determine the facility's compliance status. The inspection revealed no compliance problems with respect to RCRA.

On January 20, 1994, the IEPA inspected the Altrachem facility. The purpose of the compliance inspection was to determine the facility's compliance status. The inspection revealed no compliance problems with respect to RCRA. Mr. Edmonds, owner and operator at the facility, stated during the inspection that the facility processed 6,200 drums of waste in 1993.

On February 2, 1995, the IEPA inspected the Altrachem facility. The purpose of the compliance inspection was to determine the facility's compliance status. The inspection revealed no compliance problems with respect to RCRA. The IEPA inspection noted that the facility had received 120 drums of waste oil and 40 drums of paint in 1994. Mr. Edmonds, owner and operator at the facility, stated during the inspection that the facility processed 6,200 drums of waste in 1994.

#### Environmental Setting

The site is bordered by railroad tracks and residences to the south, industry to the north, 18th Street and residences to the west, and residences to the east. The nearest residential property is 50 feet west of the facility. According to a United States Geological Survey (USGS) topographic map of the area, there are no sensitive environments or wetlands within three miles of the facility.

To determine the location of groundwater wells in the vicinity of the facility, TechLaw submitted an information request to the Illinois State Water Survey (ISWS) which maintains databases for all registered private groundwater wells and all registered public, industrial, and commercial wells (PICS wells). In the State of Illinois, groundwater wells with less than 25 users or with yields of less than 75 gallons per minute are registered as private wells, while wells with greater than 25 users or with yields of greater than 75 gallons per minute are registered as PICS wells.

The ISWS groundwater well request identified four private wells within one-half mile of the facility which are drilled at depths between 125 and 250 feet and are registered as being in-use. The use of these wells are registered as domestic and industrial/commercial uses. No PICS wells were identified within one-half mile of the facility site.

The ISWS response indicate that bedrock is encountered between 120 and 200 feet below ground surface. However, no information was available in the IEPA file material concerning site-specific soils or groundwater conditions.

The facility property slopes to the south with drainage entering Hickory Creek approximately 500 feet to the southwest. Hickory Creek discharges into the Des Plaines River approximately two miles to the southwest (Appendix C). The usage of the Des Plaines River is characterized as industrial, agricultural, and recreational.

The facility is not located with the 100-year flood plain of the Des Plaines River. However, the facility is located within a potentially flood-prone area between two branches of Hickory Creek which discharges to the Des Plaines River. The 24-hour rainfall for the facility location is estimated at 2.5 inches, and the net precipitation for the facility location is also estimated at 2.5 inches.

#### Release History

Releases of hazardous constituents from the facility are documented in site photographs (see Photographs 1, 2, 3, 4, and 5) due to the fire which destroyed the facility in January of 1987. Approximately 140 drums of special waste were damaged, releasing hazardous constituents to soil (see Former Facility Fire Debris Area, SWMU 1).

### III. SOLID WASTE MANAGEMENT UNITS

This section presents a description of the Solid Waste Management Units (SWMUs) identified through the PA/VSI for the Altrachem facility. Photograph numbers correspond to those presented in the Photograph Log in Appendix A. The locations of SWMUs are presented in Appendix C.

**TABLE 1**

**SOLID WASTE MANAGEMENT UNITS AND AREAS OF CONCERN  
ALTRACHEM, INC., JOLIET, ILLINOIS**

<b>SWMU/AOC</b>	<b>Description</b>	<b>Release Potential</b>
SWMU 1	Former Facility Fire Debris Area	High
SWMU 2	Special Waste Drum Storage Areas	High
SWMU 3	Special Waste Roll-Off Containers	Low
SWMU 4	Former Oil Separation ASTs	Low
SWMU 5	Scrap Metal Roll-Off Container	Low
AOC A	Leaded Fuel UST	Moderate

### **SWMU 1 - Former Facility Fire Debris Area**

**Photograph No(s):** 1, 2, 3, 4, 5, 6, 7, 8, 9

**Log Book Photograph No(s):** 1-8, 1-1, 1-3, 1-4

**Period of Operation:** January 1987 to Present

**Location:** This unit is located in and around the former Edmonds Enterprises facility building which housed special waste drum storage and bulking equipment.

**Physical Description:** This unit consisted of facility fire debris and damaged special waste drums from a January 13, 1987 fire which destroyed the former Edmonds Enterprises operations located on the facility site.

On January 22, 1987, Altrachem notified the IEPA of the fire. This notification to the IEPA stated that, at the time of the fire, 140 full drums of non-hazardous waste and 20 cubic yards of special waste were present on the site. During the VSI, Mr. Edmonds supplied TechLaw with photocopies of photographs which had been taken of the facility following the January 13, 1987 fire (Photograph Nos. 1, 2, 3, 4, 5). The fire debris was manifested as special waste and transported from the site in 1987, although the exact date of debris removal is not known.

According to the IEPA permit for the facility, all special wastes on the facility property at the time of the fire were to be accompanied with manifests and analytical data documenting the hazardous constituent levels of the wastes. However, on January 31, 1986, U.S. EPA Region 5 received a notification of hazardous waste activity for the Altrachem facility which listed the following hazardous wastes: D001, D002, D003, F001, F001, F003, F004, F005, K049, K048, K050, K051, K087, K052, U002, U031, U039, U019, U220, U159, U051, U052, U055, U056, U057, U074, U088, U102, U092, U110, U001, and U117. Altrachem re-notified on August 14, 1987, which was after the date of the facility fire. This notification still listed the facility as a hazardous waste generator (D001, F001, F002, F003, F005). Thus, it is possible that these wastes were on the facility property at the time of the fire in 1987.

In addition, this unit may also have contained debris from the facility's used oil separation ASTs which were installed in 1982 and modified in 1986. This system consisted of two, steel, 4,800 gallon vertical ASTs which operated by settling water from the oil portion of the oil/water mixture. To accommodate the wastes after pre-treatment, two, steel, 4,800 storage tanks were installed to accept the separated oil for distillation and the water for off-site shipment for disposal.

**Wastes Managed:** This unit managed facility fire debris including 140 drums and a 20-cubic yard roll-off container of special waste containing hazardous constituents. Special waste managed by the facility has included the following:

- Water-based paints, inks, sealants, adhesive sludges;
- Paper product manufacturer wastes;
- Catch basin, grease trap, and food wastes;
- Wastes from cleaning tanks, equipment, and structures;
- Wastes from cooling system flushing and cleaning;
- Wastes from boiler blow-down and back-flushing;
- Spent drilling and cutting fluids;
- Dust collector wastes from air pollution control equipment;
- Contaminated soils from spills of non-hazardous waste products; and,
- Off -specification and scrap commercial products including detergents, latex paints, adhesives, and sealants.

Some wastes may have met the criteria for listed, hazardous waste (see Physical Description above). However, the facility claimed that all records pertaining to waste management prior to 1987 were destroyed in the January 1987 fire. Thus, documentation of waste constituents prior to 1987 is not available from the facility nor was located in the IEPA file material.

In addition, SWMU 1 contains fire debris related to the used oil separation processing at the facility. Used oil consisted of the following: lubricating oils, gear and motor oils, light-weight drawing oils, machine oils, cutting oils, oily water wastes, hydraulic oils, mineral oils, mineral spirits and high flash naphthas, and other non-hazardous solvents. In addition, the unit may have managed Stoddard solvent and kerosene as the facility had requested on October 11, 1982 that these waste be added to the facility's waste management facility permit.

**History of Releases:** A facility fire in 1987 resulted in the release of special waste containing hazardous constituents to soil. The debris was reportedly removed from the facility and manifested for transport and disposal as a special waste. However, the IEPA required no corrective action or confirmation sampling.

**Potential for Past/present Release:**

**High ( X )**  
**Moderate (   )**  
**Low (   )**

**Conclusions:** It is recommended that confirmation soil sampling be undertaken to determine the nature and extent of possible soil contamination in the vicinity of the former facility building. Any further action should be coordinated with the IEPA.

## **SWMU 2 - Special Waste Drum Storage Areas**

**Photograph No(s):** 6, 7, 8, 9, 10

**Log Book Photograph No(s):** 1-8, 1-1, 1-3, 1-4, 1-5

**Period of Operation:** 1986 to Present

**Location:** This unit is currently comprised of three general storage areas located in the vicinity of the concrete foundation of the former Edmonds Enterprises facility building.

**Physical Description:** This unit contains special waste, including off-specification commercial products, stored in 55-gallon steel drums, various size pails, or boxed on wooden pallets. Drums are stored on the concrete foundation of the former facility building and on graveled areas. No secondary containment is associated with the storage areas or with special waste loading/unloading areas.

Solid, special wastes are bulked directly into roll-off containers through the transfer of material from drums or boxes into Special Waste Roll-Off Containers (SWMU 3) for off-site transport and disposal as special waste. Past IEPA inspections have indicated that the facility processes up to 6,200 drums of waste per year. At the time of the VSI, the facility was storing 400 drums of special wastes, and Mr. Edmonds stated that the permit capacity for the facility is 990 drums.

Empty drums from bulking are kept for recycling, and cardboard, wooden pallets, and associated packaging material are discarded or recycled (see Photo 14). Scrap metal, including damaged drums and drum bands, are accumulated in a 20-cubic yard Scrap Metal Roll-Off Container (SWMU 5) which is periodically picked-up by a scrap metal recycler.

**Wastes Managed:** This unit manages special wastes (see SWMU 1 Wastes Managed). Former wastes managed by this unit potentially included used oil, Stoddard solvent, and kerosene as also described in the Wastes Managed section of the SWMU 1 description.

**History of Releases:** No history of releases were identified during the PA/VSI for this unit. However, no loading or unloading areas were constructed with secondary containment and some drums and pallets of off-specification commercial product were observed to be damaged.

**Potential for Past/present Release:**

	<b>High</b>	<b>( X )</b>
	<b>Moderate</b>	<b>( )</b>
	<b>Low</b>	<b>( )</b>

**Conclusions:** It is recommended that confirmation soil sampling be undertaken to determine the nature and extent of possible soil contamination in the vicinity of this unit. Any further action should be coordinated with the IEPA.

**SWMU 3 - Special Waste Roll-Off Containers**

**Photograph No(s):** 11, 12

**Log Book Photograph No(s):** 1-2, 1-6

**Period of Operation:** 1986 to Present

**Location:** This unit is located in proximity to the Special Waste Drum Storage Areas (SWMU 2) in the vicinity of the concrete foundation of the former processing building.

**Physical Description:** This unit consists of two, 20-cubic yard, steel roll-off containers which are used to bulk special waste from the Special Waste Drum Storage Areas (SWMU 2). The roll-off containers are stored on either concrete or on gravel, and no secondary containment is associated with the units.

Roll-off containers are periodically transported off-site for disposal as special waste. Approximately five, 20-cubic yard roll-off containers are generated per month. Ozinga Transportation Systems, Inc., Matteson, Illinois, has been the facility's primary special waste hauler, while Landon Lakes Landfill, Chicago, Illinois, has been the facility's primary special waste disposal landfill.

**Wastes Managed:** This unit manages special wastes from the Special Waste Drum Storage Areas (see SWMU 2).

**History of Releases:** No history or evidences of releases were identified during the PA/VSI.

**Potential for Past/present Release:**

<b>High</b>	( )
<b>Moderate</b>	( )
<b>Low</b>	( X )

**Conclusions:** No further action is recommended for this unit.



#### **SWMU 4 - Former Oil Separation ASTs**

**Photograph No(s):** 10, 12

**Log Book Photograph No(s):** 1-5, 1-6

**Period of Operation:** 1982 to 1987

**Location:** This unit is located on the east side of the former facility building foundation near the center of the property.

**Physical Description:** This unit consists of three, mild steel, 4,800 gallon ASTs which were used in the facility's former oily water waste separation processing. The ASTs were used to accept either the separated oil for distillation or wastewater for off-site shipment for disposal. The tanks were constructed of a mild steel.

**Wastes Managed:** This unit managed used lubricating oils, gear and motor oils, light-weight drawing oils, machine oils, cutting oils, oily water wastes, hydraulic oils, mineral oils, mineral spirits and high flash naphthas, and other non-hazardous solvents.

**History of Releases:** No history of release were identified with the operational history of this unit. However, because of the location of these ASTs in and adjacent to SWMU 1, potential releases from the unit during the January 1987 fire are identified in the Former Facility Fire Debris Area (SWMU 1).

<b>Potential for Past/present Release:</b>	<b>High</b> ( )
	<b>Moderate</b> ( )
	<b>Low</b> (X)

**Conclusions:** No further action is recommended for this unit.

**SWMU 5 - Scrap Metal Roll-Off Container**

**Photograph No(s):** 13

**Log Book Photograph No(s):** 1-9

**Period of Operation:** 1982 to Present

**Location:** This unit is located on the eastern portion of the facility property.

**Physical Description:** This unit consists of one, steel, 20-cubic yard roll-off container which is used to accumulated scrap metal, including damaged drums and drum bands. The unit is stored on concrete and is periodically picked up by a scrap metal dealer for recycling.

**Wastes Managed:** This unit manages scrap metal.

**History of Releases:** No history or evidences of releases were identified through the PA/VSI.

**Potential for Past/present Release:**

<b>High</b>	<b>( )</b>
<b>Moderate</b>	<b>( )</b>
<b>Low</b>	<b>( X )</b>

**Conclusions:** No further action is recommended for this unit.

#### IV. AREAS OF CONCERN

This section presents a description of the Area of Concern (AOC) identified through the PA/VSI for the Altrachem facility. The location of the AOC is provided in Appendix C.

### **AOC A - Leaded Fuel UST**

**Photograph No(s):** 13

**Log Book Photograph No(s):** 1-9

**Description:** During the VSI, a former leaded fuel pump area was observed on the southeast corner of the facility property. The concrete surface associated with the fuel pump was being used as a foundation for the Scrap Metal Roll-Off Container (SWMU 5). The pump was specifically labeled to indicate that it managed leaded fuel.

Mr. Edmonds stated to TechLaw that a leaded fuel UST had been removed from the area. However, there was no visual evidence to suggest that the UST had been removed, and file material did not indicate that UST closure had been undertaken.

**Conclusions:** This AOC is characterized with a moderate release potential as the age and materials of construction are unknown, and there is no record of UST closure. It is recommended that the closure of the UST be verified. If this is not possible, confirmation soil sampling should be undertaken to determine the nature and extent of contamination. Any further action should be coordinated with the IEPA.

## V. CONCLUSIONS

### Former Facility Fire Debris Area (SWMU 1)

It is recommended that confirmation soil sampling be undertaken to determine the nature and extent of possible soil contamination in the vicinity of the former facility building. Any further action should be coordinated with the IEPA.

### Special Waste Drum Storage Area (SWMU 2)

It is recommended that confirmation soil sampling be undertaken to determine the nature and extent of possible soil contamination in the vicinity of this unit. Any further action should be coordinated with the IEPA.

### AOC A - Leaded Fuel UST

It is recommended that the closure of the UST be verified. If this is not possible, confirmation soil sampling should be undertaken to determine the nature and extent of contamination. Any further action should be coordinated with the IEPA.



## VI. REFERENCES

- July 15, 1982      Sallie Smith, IEPA-DLPC. Letter to Edmond Enterprises regarding deficiencies in application for permit to develop a waste management facility which was received by IEPA-DLPC in June 1982.
- October 11, 1982      W. H. Edmond, Edmond Enterprises. Letter to Mr. Thomas Cavanagh, IEPA, regarding the inclusion of mineral spirits, Stoddard solvent, and kerosene processing into Permit No. 1982-30-DE.
- September 22, 1983      IEPA. Observation Report of Edmonds Enterprises facility.
- December 27, 1983      IEPA. Observation Report of Edmonds Enterprises facility.
- March 19, 1985      Brock Reinhard, American Environmental Technologies. Letter to Eugene Theioss, IEPA-DLPC, regarding supplemental permit information to modify operations at Edmond Enterprises.
- March 20, 1985      Robert Gardner. Letter to IEPA-DLPC stating that the Gardner Investment Company is the owner of the facility property at 18 Henderson Avenue, Joliet, Illinois, 60432. Letter states that Gardner Investment will lease property to Edmond Enterprises.
- April 19, 1985      IEPA. Observation Report of Edmonds Enterprises facility.
- July 11, 1985      IEPA. Supplemental Permit issued to Edmonds Enterprises for the installation of shredder, piping, and liquid collection system to shred non-hazardous, commercial products.
- January 28, 1986      Altrachem Enterprises. Notification of Hazardous Waste Activity submitted to U.S. EPA Region 5.
- February 10, 1986      IEPA. Supplemental Permit issued to Edmonds Enterprises to allow additional drum container storage, the bulking of non-hazardous special waste, and the bulking of semi-solid and solid special wastes into roll-off containers.
- March 3, 1986      American Environmental Technologies, Inc. (AET). Permit application submitted to IEPA-DLPC: Application For Permit To Develop a Waste Storage/Treatment Site for Edmond Enterprises, Inc., Joliet, Illinois.

June 2, 1986	IEPA. Supplemental Permit issued to Edmonds Enterprises to allow installation of non-hazardous special waste treatment system to solidify non-hazardous special waste with fly ash, cement kiln dust, and lime dust.
January 22, 1987	Brock Reinhard, Altrachem. Letter to Eugene Theious, IEPA, concerning fire which destroyed Altrachem facility on January 13, 1987.
January 29, 1987	W. H. Edmonds, Altrachem. Letter to IEPA-DAPC concerning fire which destroyed Altrachem facility on January 13, 1987.
July 16, 1987	Lawrence Eastep, IEPA. Letter to Altrachem concerning review of closure plan for the Altrachem facility.
August 14, 1987	Brock Reinhard, Altrachem. Letter to Lawrence Eastep, IEPA, regarding Altrachem's status as a RCRA-regulated TSD facility.
June 16, 1992	Jose Mora, IEPA. Compliance inspection report for Altrachem facility.
January 22, 1993	Martin Tippin, IEPA. Compliance inspection report for Altrachem facility.
January 20, 1994	Martin Tippin, IEPA. Compliance inspection report for Altrachem facility.
February 2, 1995	Martin Tippin, IEPA. Compliance inspection report for Altrachem facility.
December 3, 1997	Gerald Phillips, U.S. EPA, Region 5. Visual Site Inspection Notification letter to William H. Edmond, President, Altrachem, Inc.
December 16, 1997	Kevin Higgins and Anthony Mubiru, TechLaw. Visual Site Inspection Field Notebooks.



APPENDIX A  
Visual Site Inspection Photograph Log

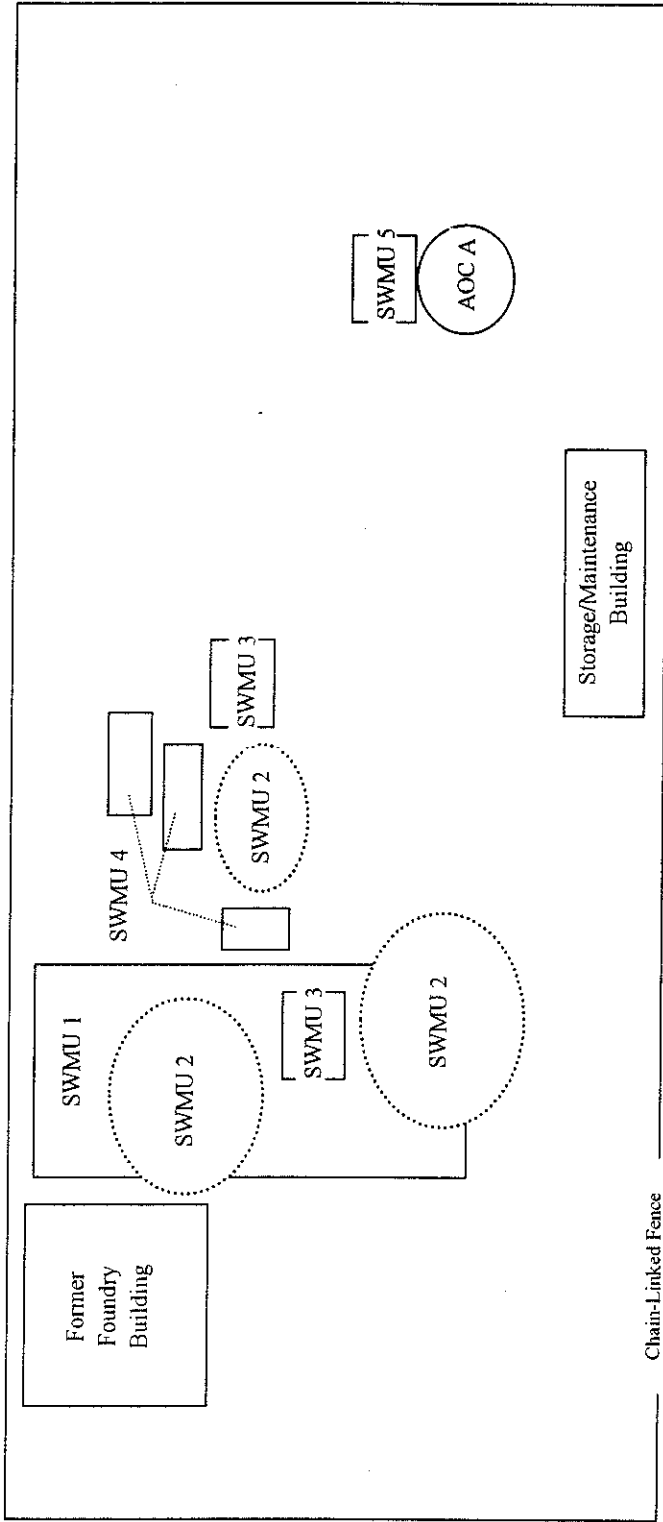




Altrachem, Inc.  
18 Henderson Avenue, Joliet, Illinois

Length of Property  
325 Feet

125 Feet



← N →

Solid Waste Management Units and Area of Concern

- |        |                                   |
|--------|-----------------------------------|
| SWMU 1 | Former Facility Fire Debris Area  |
| SWMU 2 | Special Waste Drum Storage Areas  |
| SWMU 3 | Special Waste Roll-Off Containers |
| SWMU 4 | Used Oil Separation ASTs          |
| SWMU 5 | Scrap Metal Roll-Off Container    |
| AOC A  | Leaded Fuel UST                   |

Not Drawn to Scale

Henderson  
Avenue





ILLINOIS

QUADRANGLE LOCATION

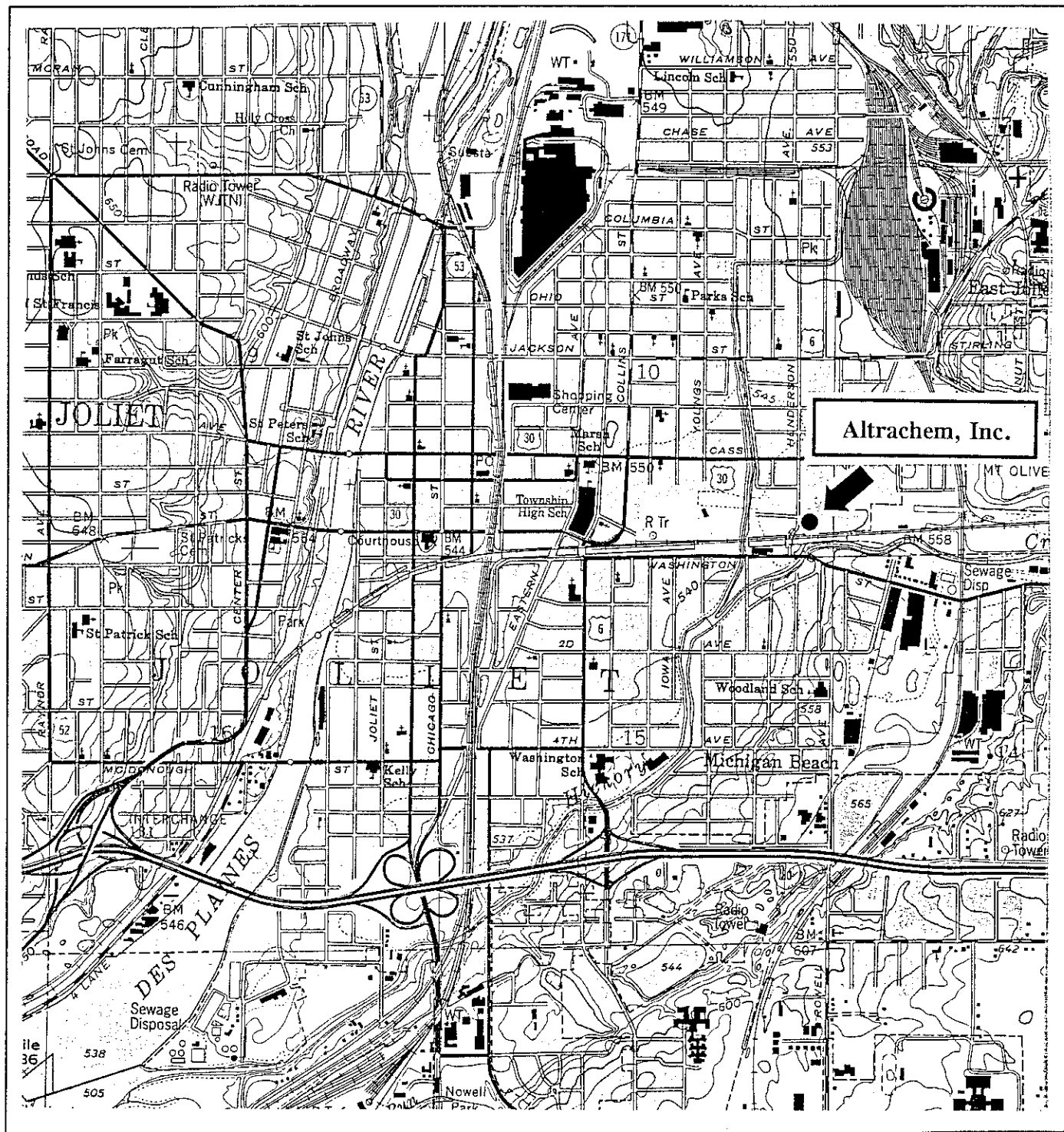
JOLIET, ILL.

SE/4 JOLIET 15' QUADRANGLE

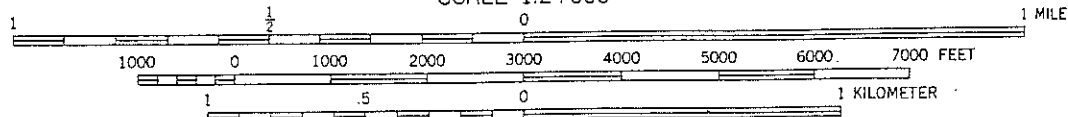
41088-E1-TF-024

1993

DMA 3367 II SE - SERIES V883



SCALE 1:24 000



CONTOUR INTERVAL 10 FEET  
DOTTED LINES REPRESENT 5-FOOT CONTOURS  
NATIONAL GEODETIC VERTICAL DATUM OF 1929

APPENDIX C  
Facility Location and Layout with SWMU/AOC Locations





**APPENDIX B**  
**Visual Site Inspection Field Notebooks**



IF FOUND PLEASE RETURN TO:

FORESTRY SUPPLIERS

49365

TO:

NAME \_\_\_\_\_

COMPANY \_\_\_\_\_

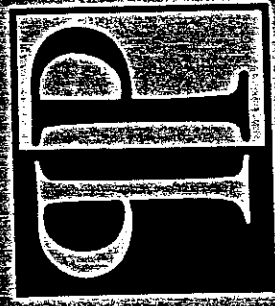
STREET \_\_\_\_\_

CITY \_\_\_\_\_

STATE \_\_\_\_\_

ZIP \_\_\_\_\_

PHONE \_\_\_\_\_



# JOB BOOK

FROM PENINSULAR PUBLISHING

PROJECT NAME Altrachem VSI

PROJECT NUMBER 6200/P05-052

CREW Anthony, Aubrey, Kevin Higgins

DATE 12/16/97 BOOK # 1 OF 2

WEATHER \_\_\_\_\_

FIELD BOOK  
16 PAGE  
8 LEAVES  
50% RAG

## CURVE FORMULAS

$$T = R \tan \frac{1}{2} I$$

$$T = \frac{50 \tan \frac{1}{2} I}{\sin \frac{1}{2} D}$$

$$\sin \frac{1}{2} D = \frac{50}{R}$$

$$\sin \frac{1}{2} D = \frac{50 \tan \frac{1}{2} I}{T}$$

$$R = T \cot \frac{1}{2} I$$

$$R = \frac{50}{\sin \frac{1}{2} D}$$

$$E = R \text{ ex. sec } \frac{1}{2} I$$

$$E = T \tan \frac{1}{2} I$$

$$\text{Chord def.} = \frac{\text{chord}^2}{R}$$

$$\text{No. chords} = \frac{I}{D}$$

$$\text{Tan. def.} = \frac{1}{2} \text{ chord def.}$$

The square of any distance, divided by twice the radius, will equal the distance from tangent to curve, very nearly.

To find angle for a given distance and deflection.

Rule 1. Multiply the given distance by .01745 (def. for 1° for 1 ft.) and divide given deflection by the product.

Rule 2. Multiply given deflection by 57.3, and divide the product by the given distance.

To find deflection for a given angle and distance. Multiply the angle by .01745, and the product by the distance.

## GENERAL DATA

RIGHT ANGLE TRIANGLES. Square the altitude, divide by twice the base. Add quotient to base for hypotenuse.

Given Base 100, Alt.  $10.10^2 \div 200 = .5$ ;  $100 + .5 = 100.5$  hyp.

Given Hyp. 100, Alt.  $25.25^2 \div 200 = 3.125$ ;  $100 - 3.125 = 96.875 = \text{Base}$ .

Error in first example, .002; in last, .045.

To find Tons of Rail in one mile of track: multiply weight per yard by 11, and divide by 7.

LEVELING. The correction for curvature and refraction, in feet and decimals of feet is equal to  $0.574 d^2$ , where  $d$  is the distance in miles. The correction for curvature alone is closely,  $\frac{1}{2} d^2$ . The combined correction is negative.

PROBABLE ERROR. If  $d_1, d_2, d_3$ , etc. are the discrepancies of various results from the mean, and if  $\sum d^2$  is the sum of the squares of these differences and  $n$  is the number of observations, then the probable error of the mean =  $\pm 0.6745 \sqrt{\frac{\sum d^2}{n(n-1)}}$

## MINUTES IN DECIMALS OF A DEGREE

1'	2'	3'	4'	5'	6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'	22'	23'	24'	25'	26'	27'	28'	29'	30'	31'	32'	33'	34'	35'	36'	37'	38'	39'	40'	41'	42'	43'	44'	45'	46'	47'	48'	49'	50'	51'	52'	53'	54'	55'	56'	57'	58'	59'	60'
.0167	.0333	.0500	.0667	.0833	.1000	.1167	.1333	.1500	.1667	.1833	.2000	.2167	.2333	.2500	.2667	.2833	.3000	.3167	.3333	.3500	.3667	.3833	.4000	.4167	.4333	.4500	.4667	.4833	.5000	.5167	.5333	.5500	.5667	.5833	.6000	.6167	.6333	.6500	.6667	.6833	.7000	.7167	.7333	.7500	.7667	.7833	.8000	.8167	.8333	.8500	.8667	.8833	.9000	.9167	.9333	.9500	.9667	.9833	.0000

## INCHES IN DECIMALS OF A FOOT

1"	2"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"	13"	14"	15"	16"	17"	18"	19"	20"	21"	22"	23"	24"	25"	26"	27"	28"	29"	30"	31"	32"	33"	34"	35"	36"	37"	38"	39"	40"	41"	42"	43"	44"	45"	46"	47"	48"	49"	50"	51"	52"	53"	54"	55"	56"	57"	58"	59"	60"
.0833	.1667	.2500	.3333	.4167	.5000	.5833	.6667	.7500	.8333	.9167	.0000	.0833	.1667	.2500	.3333	.4167	.5000	.5833	.6667	.7500	.8333	.9167	.0000	.0833	.1667	.2500	.3333	.4167	.5000	.5833	.6667	.7500	.8333	.9167	.0000	.0833	.1667	.2500	.3333	.4167	.5000	.5833	.6667	.7500	.8333	.9167	.0000	.0833	.1667	.2500	.3333	.4167	.5000	.5833	.6667	.7500	.8333	.9167	.0000

Am, D/16/97

①

0910: Arrived at Altracham facility with Mr. Kevin Higgins of Tech Law, Inc. Met by Mr. Edmonds of Altracham, Inc.

0915: Kevin outlined <sup>the</sup> Tech Law team's purpose for visiting Altracham's facility.

0917: Mr. Edmonds, on receiving hazardous wastes before or after fire in 1987.

Never, ever have.

0918: Mr. Edmonds, on activities regulated at facility: \* started operations in 1981?

\* Original permit was issued in 08/16/80 (holding on high naphthalene).

\* Only regulated activity is transport-album

\* Finger print samples of all incoming & outgoing workers.

(2)

0920: Mr. Edmonds on Attraction's generator (of hazardous) & marketer (of hazardous) status at per facility's completion of EPA's Notification of Hazardous Activity

Forms:

\* Attraction was anticipating (at the time it completed the forms) to participate in a joint venture to operate as a waste-as-a-fuel (blending waste oil) processor. However, the joint venture fell through.

0935: Mr. Edmonds, on materials they receive:

\* Only (interstate) receive special waste from special waste generators as defined by the Illinois EPA.  
\* Allowed by their (Attraction's) I EPA permit to receive non-hazardous oils.

Am, 12/16/97

(2)

0940:

0950: Begun facility walk-around led by Mr. Edmonds.

1000: Mr. Edmonds on Attraction's premises:

\* 4,800 Sq. ft. → originally leased this space from Mr. Gardner.

Approx breadth 125 ft

\* 2.8 acres → Bought after Nov. 88 (after the fire) currently bldg a new unit.

length is 325 ft approx

\* Original purpose of the premises was as a boundary.

\* Boundary closed in 1960 → bought by Gardner → Edmonds leases 4,800 sq ft portion → fire in 1987 → Edmonds buys the ashes

Mr. Edmonds, on post boundary (4-)  
1016: DOE gave them a clean bill of health.

Photo 1 (Roll 1), Facing North, 1011

Every drum has a job #. Which is kept in the tracking system.

\* View of non-hazardous waste containers (labelled) that are kept in the storage in the uncovered structure next to the office bldg. The containers (55 gal, metal & plastic drums) rest on wooden platform which in turn rest on concrete flooring.

Photo 2, facing East, 1015-

View of bulking facility (unit) the red container is the roll-off box.

Photo 3:

1017

View facing west of waste drums, Red (covered) unit is the roll-off box. Office bldg is in the background.

Photo 4:

1020

View facing west of waste drum storage areas.

Photo 5:

1022

View facing north of filled waste drums. The tanks in the background will be used for wastewater processing.

Photo 6:

1025

View facing north of another 20 yd roll-off box next to the filled waste drums. Wastewater tanks to the left.

(6)

Photo 7

1028

View facing north of waste containers used for holding corrugated cardboard boxes.

Photo 8

1030

View facing west of outlay of the facility's drum storage areas.

Right - filled drums  
Left - empty drums

Background to the right - empty tanks to be used for wastewater treatment (see photo 5)

Photo 9

1032

View facing east of Scrap metal container.

1035: Inspected garage area.

(7)

1045: Completed final fly inspection, returned to Mr. Edmonds' office.

\* Kevin Higgins addressed information needed issue  
\* Mr. Edmonds provided copies of documents

1100: Mr. Edmonds, in:

Process overview (of tracking system)

Incoming

1. Sampled waste stream → Altrachem gives each sample (color numbers & color stream #)

↓  
Assigns other #5 like job #, waste stream #, waste codes, quantity, hauler info etc.

1115: Completed wrap-up meeting.

Task #1815 / 726-8666

1140: Left facility premises with Kevin Higgins

Am. 11/16/97

KEVIN HIGGINS



# JOB BOOK

FORESTRY SUPPLERS  
49365

DATE PURCHASED \_\_\_\_\_

BY WHOM \_\_\_\_\_

FOR WHAT PURPOSE \_\_\_\_\_

AMOUNT \_\_\_\_\_

PAID BY \_\_\_\_\_

RECEIVED

DATE \_\_\_\_\_

BY \_\_\_\_\_

FOR \_\_\_\_\_



## CURVE FORMULAS

$$\begin{aligned} \Delta &= R \tan \frac{1}{2} I \\ T &= \frac{50 \tan \frac{1}{2} I}{\sin \frac{1}{2} D} \\ \sin \frac{1}{2} D &= \frac{50}{R} \\ \sin \frac{1}{2} D &= \frac{50 \tan \frac{1}{2} I}{T} \end{aligned}$$

$$\begin{aligned} R &= T \cot \frac{1}{2} I \\ R &= \frac{50}{\sin \frac{1}{2} D} \\ E &= R \text{ ex. sec } \frac{1}{2} I \\ E &= T \tan \frac{1}{2} I \end{aligned}$$

$$\text{Chord def.} = \frac{\text{chord}^2}{R}$$

$$\text{No. chords} = \frac{I}{D}$$

$$\text{Tan. def.} = \frac{1}{2} \text{ chord def.}$$

The square of any distance, divided by twice the radius, will equal the distance from tangent to curve, very nearly.

To find angle for a given distance and deflection.

Rule 1. Multiply the given distance by .01745 (def. for 1° for 1 ft.) and divide given deflection by the product.

Rule 2. Multiply given deflection by 57.3, and divide the product by the given distance.

To find deflection for a given angle and distance. Multiply the angle by .01745, and the product by the distance.

## GENERAL DATA

RIGHT ANGLE TRIANGLES. Square the altitude, divide by twice the base. Add quotient to base for hypotenuse.

Given Base 100, Alt.  $10.10^2 \div 200 = .5$ .  $100 + .5 = 100.5$  hyp.

Given Hyp. 100, Alt.  $25.25^2 \div 200 = 3.125$ .  $100 - 3.125 = 96.875 = \text{Base}$ .

Error in first example, .002; in last, .045.

To find Tons of Rail in one mile of track: multiply weight per yard by 11, and divide by 7.

LEVELING. The correction for curvature and refraction, in feet and decimals of feet is equal to  $0.574 d^2$ , where  $d$  is the distance in miles. The correction for curvature alone is closely,  $\frac{1}{2} d^2$ . The combined correction is negative.

PROBABLE ERROR. If  $d_1, d_2, d_3$ , etc. are the discrepancies of various results from the mean, and if  $\sum d^2$  is the sum of the squares of these differences and  $n$  is the number of observations, then the probable error of the mean =  $\pm 0.6745 \sqrt{\frac{\sum d^2}{n(n-1)}}$

## MINUTES IN DECIMALS OF A DEGREE

1'	2'	3'	4'	5'	6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'	22'	23'	24'	25'	26'	27'	28'	29'	30'	31'	32'	33'	34'	35'	36'	37'	38'	39'	40'	41'	42'	43'	44'	45'	46'	47'	48'	49'	50'	51'	52'	53'	54'	55'	56'	57'	58'	59'	60'
.0167	.0333	.0500	.0667	.0833	.1000	.1167	.1333	.1500	.1667	.1833	.2000	.2167	.2333	.2500	.2667	.2833	.3000	.3167	.3333	.3500	.3667	.3833	.4000	.4167	.4333	.4500	.4667	.4833	.5000	.5167	.5333	.5500	.5667	.5833	.6000	.6167	.6333	.6500	.6667	.6833	.7000	.7167	.7333	.7500	.7667	.7833	.8000	.8167	.8333	.8500	.8667	.8833	.9000	.9167	.9333	.9500	.9667	.9833	.9999

## INCHES IN DECIMALS OF A FOOT

1/16"	1/8"	3/16"	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	11/16"	3/4"	13/16"	7/8"	15/16"	1"
.0625	.1250	.1875	.2500	.3125	.3750	.4375	.5000	.5625	.6250	.6875	.7500	.8125	.8750	.9375	1.0000

Purpose of Visit  
Appendix - Tour of facility (process descriptions)  
Health and Safety  
Facility History  
Additional Info - Manifests, MSDs

SWMus

- ① Shred-Pax shredder
- ② Drum Container Storage Area
- ③ Waste Oil Storage Tanks (2)
- ④ Drum Dumper (4,000 gallons)
- ⑤ Special Waste Treatment System:  
Receiving Tanks (2)  
Mixing vessel (1)  
Fly Ash storage silo w/ Baghouse  
Roll-off Box

AOCs

① Piping + Liquid Collection system

Location

Description (materials/dimensions)

Period of Operation

Waste Releases

History of Releases

Release Controls

12/16/97

12/16/97

William H. Edmonds

0905 - Willie Edmonds - opened building,  
met w/ Mr. Edmonds concerning  
VSI purpose

- Facility has never received hazardous  
waste or has never shipped  
hazardous waste from the  
facility.

- All material is KSH is tested prior

to receiving  
~~started operating~~

- August 6, 1982 ~~started~~ KSH Developmental  
Operating

Permit for rolling oils, naptha

- All material is tested ~~after~~ any  
processing takes place (before it  
is shipped off-site)

- Submitted Application for  
hazardous waste activity (Received KSH  
Jan 31, 1986)

- Submitted Reapplication for  
Hazardous waste activity (Received  
(Nov. 14, 1986)

- Facility has manifests and analytical  
data for all material that is received

KSH

12/16/97

KSH

12/16/97

It appears that the facility is operating entirely outside of RCRA Corrective Action authority within Region II ~~EPRA~~. The facility has requested to be removed from IL and Fed. ~~the~~ waste generator list.

- 1000 - Tour of facility
- Prior to fire - 4,000 sq. ft
- After fire, Attraction bought the facility site (2.0 acres) in Nov. '88

- Currently constructing building
- Only 2 people work here
- 1960 - Originally the facility site was a foundry which went out of business in 1960; DOE supplied the facility and is formally closed

- Drums are labeled w/ John numbers
- Some waste is off-spec boxed or drummed waste
- Wastewater tanks were removed from destroyed in the fire

KRH  
12/16/97

KRH 12/16/97

KCH 12/16/97

- 1030 - Torrol facility
- Currently 400 drums; permit capacity is 990 drums
- Bulking is only material process since 1987
- Ozinga Transportation Systems, Inc. Matteson, IL
- Landon Lakes 122nd and Torrance Landfill Chicago, IL
- 5, <sup>KCH</sup> 204 rollovers per month of bulking material
- No vst's on site; All kst's on site before the fire;
- Empty drums go to recycler;
- Approx. 300 empty drums per month;
- Over pack drums are visible → transporter sometimes require this
- Solid waste dumpsters; cardboard boxes from off-spec. materials
- Scrap metal sent off site for recycling
- No sampling was required after fire; all debris went off-site after the fire (untested)
- Maintenance building on-site - used only for equipment repair

124  
12/16/97



10:45

→ All drums except for drum  
container storage area are offsite after  
Jan. 13, 1987 Fire -

- All material must have analytical  
data to be received by Altrachem  
under their permit
- Material is qualitatively checked  
when received - known as the  
"Pre-Waste Stream Approval"
- Waste is tracked w/ approval code  
and a tracking number
- 1115 received manifest material
- all off-spec material is  
also non-hazardous; sometimes  
MSDS are used
- Copies of manifest for incoming,  
outgoing, analytical for incoming,  
facility <sup>site</sup> length is 325';  
" " width is 125' ~~125'~~ 123'

1140 - Left site

KRH  
12/16/97

KRH 12/16/97

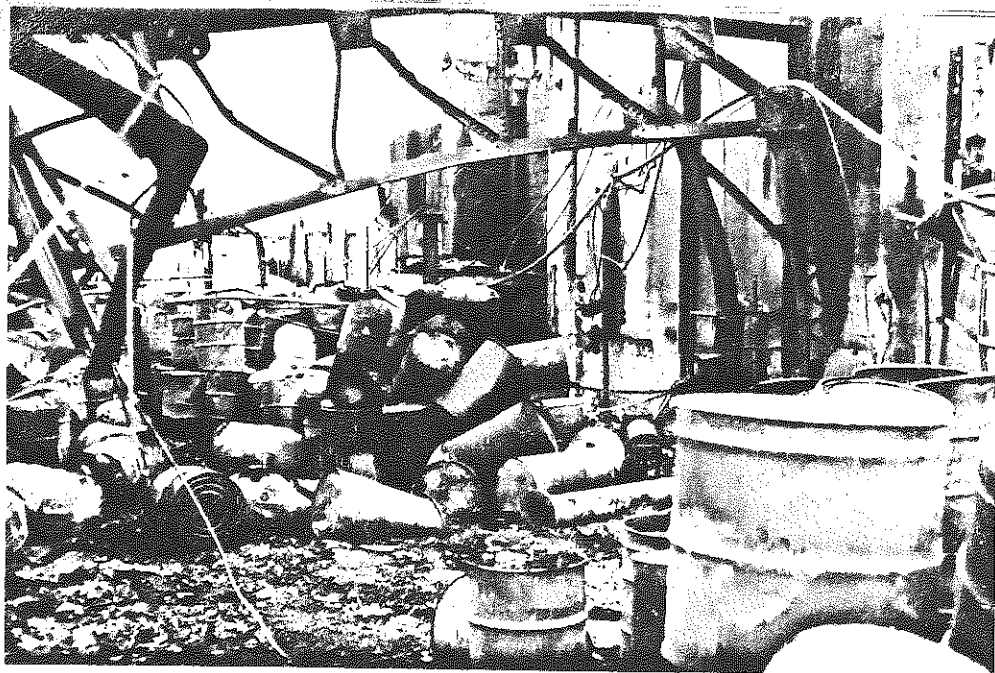


Photo No.: 1  
Date: January 1987

Description: View of Former Facility Fire Debris Area (SWMU 1) in January 1987 after fire destroyed Altrachem facility. Photocopy of photograph obtained from Mr. William Edmonds during TechLaw VSI.

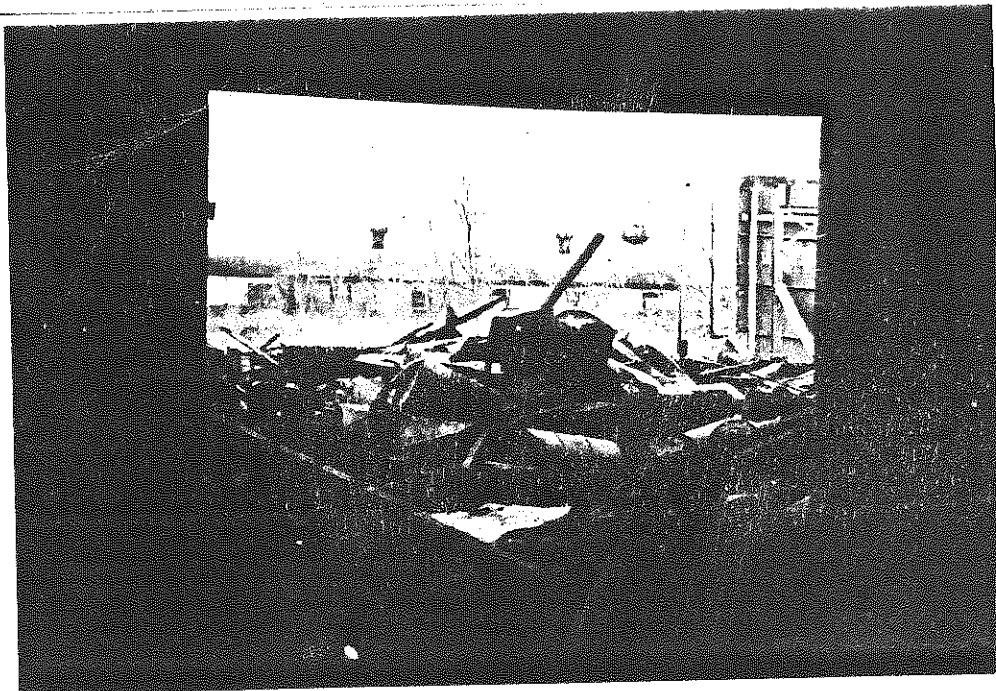


Photo No.: 2

Date: January 1987

Description: View of Former Facility Fire Debris Area (SWMU 1) in January 1987 after fire destroyed Altrachem facility. Photocopy of photograph obtained from Mr. William Edmonds during TechLaw VSI.



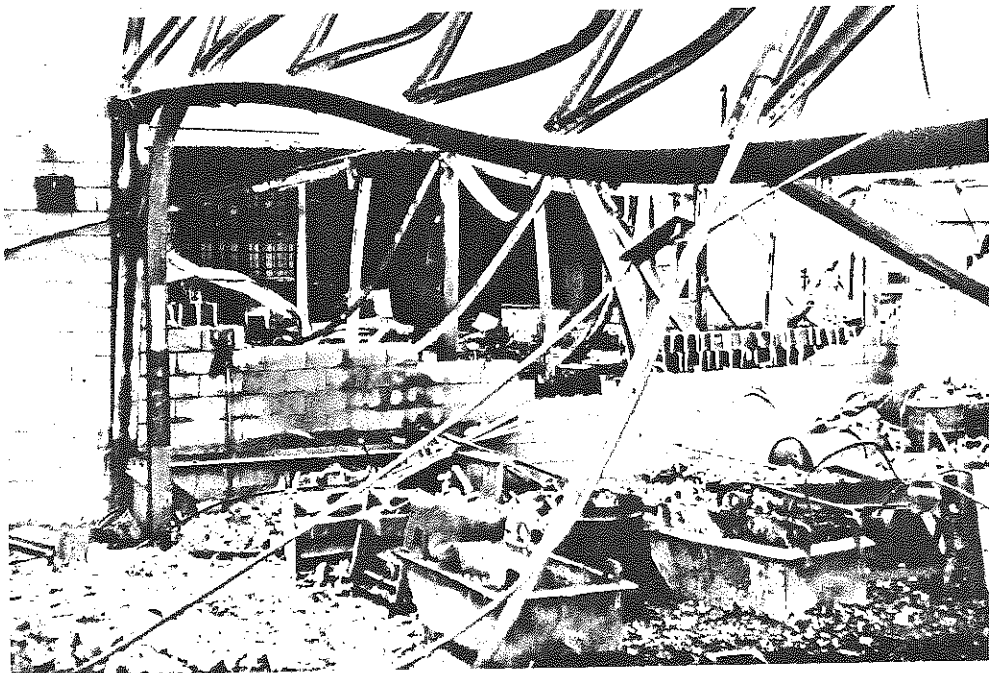


Photo No.: 3  
Date: January 1987

Description: View of Former Drum Storage Area (SWMU 1) in January 1987 after fire destroyed Altrachem facility. Photocopy of photograph obtained from Mr. William Edmonds during TechLaw VSI.

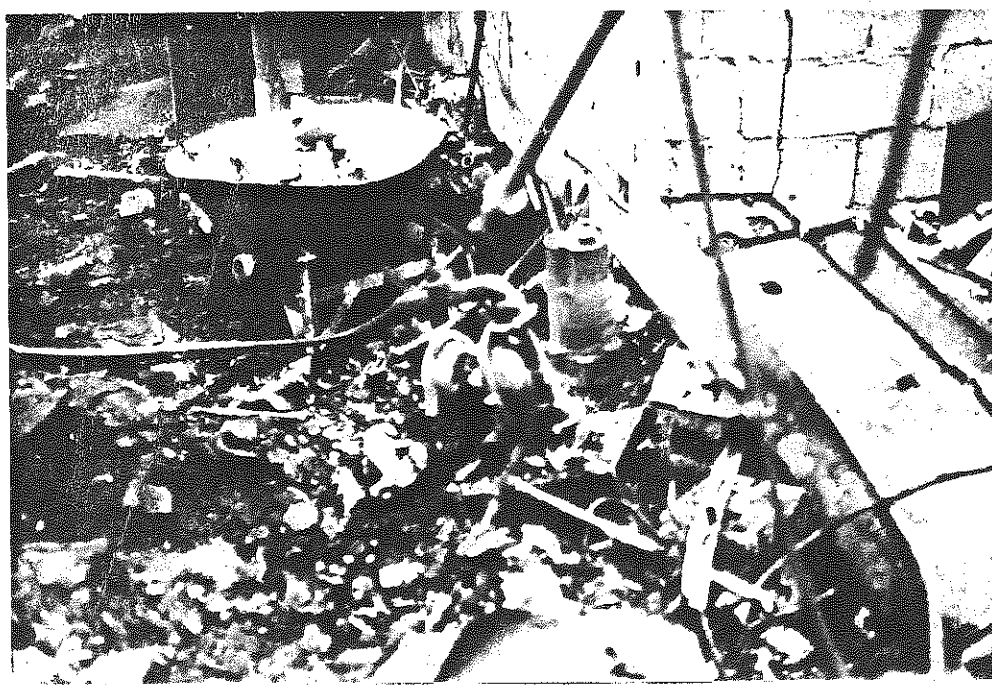


Photo No.: 4

Date: January 1987

Description: View of Former Facility Fire Debris Area (SWMU 1) in January 1987 after fire destroyed Altrachem facility. Photocopy of photograph obtained from Mr. William Edmonds during TechLaw VSI.

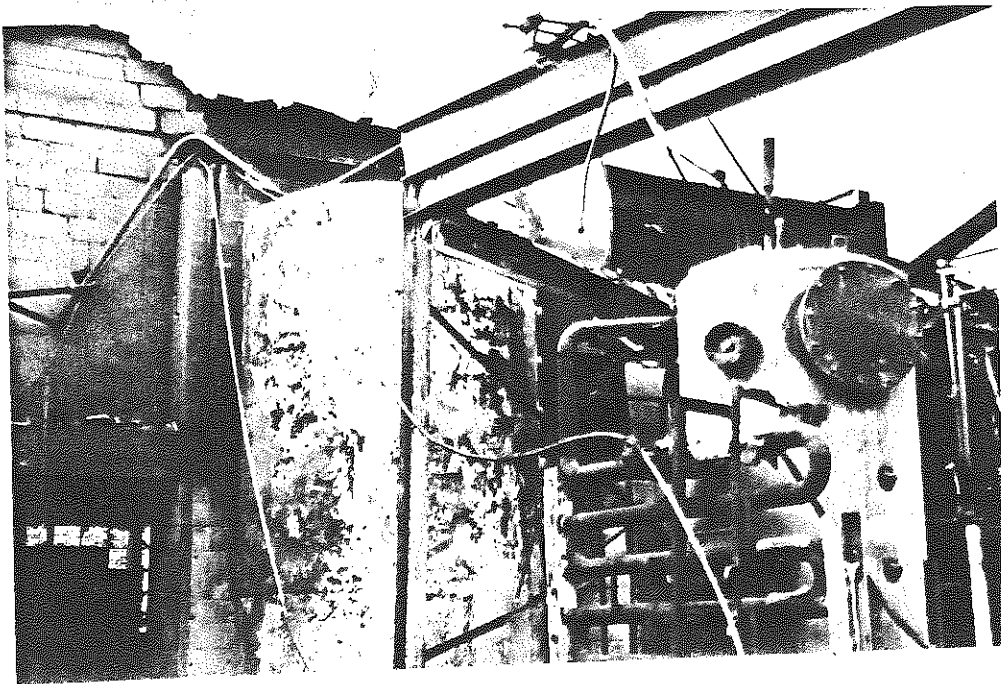


Photo No.: 5

Date: January 1987

Description: View of Former Facility Fire Debris Area (SWMU 1) in January 1987 after fire destroyed Altrachem facility. Photocopy of photograph obtained from Mr. William Edmonds during TechLaw VSI.



Photo No.: 6  
Logbook Photo No.: 1-8  
Date: 12/16/97

Time: 1030  
Direction: W

Description: Current view of Former Facility Fire Debris Area (SWMU 1) and Special Waste Drum Storage Areas (SWMU 2).



Photo No.: 7  
Logbook Photo No.: 1-1  
Date: 12/16/97

Time: 1011  
Direction: N

Description: Current view of Former Facility Fire Debris Area (SWMU 1) and Special Waste Drum Storage Areas (SWMU 2).



Photo No.: 8

Logbook Photo No.: 1-3

Date: 12/16/97

Time: 1017

Direction: W

Description: Current view of Former Facility Fire Debris Area (SWMU 1) and Special Waste Drum Storage Areas (SWMU 2).





Photo No.: 9  
Logbook Photo No.: 1-4  
Date: 12/16/97

Time: 1020  
Direction: W

Description: Current view of Former Facility Fire Debris Area (SWMU 1) and Special Waste Drum Storage Areas (SWMU 2).



Photo No.: 10

Logbook Photo No.: 1-5

Date: 12/16/97

Time: 1022

Direction: N

Description: View of Special Waste Drum Storage Areas (SWMU 2) and Former Oil Separation ASTs (SWMU 4) in background.





Photo No.: 11  
Logbook Photo No.: 1-2  
Date: 12/16/97

Time: 1015  
Direction: E

Description: View of Special Waste Roll-Off Containers (SWMU 3) used in bulking special waste for off-site transport for disposal.



Photo No.: 12

Logbook Photo No.: 1-6

Date: 12/16/97

Time: 1025

Direction: N

Description: View of Special Waste Roll-Off Containers (SWMU 3) and Former Oil Separation ASTs (SWMU 4) in background.



Photo No.: 13  
Logbook Photo No.: 1-9  
Date: 12/16/97

Time: 1032  
Direction: E

Description: View of Scrap Metal Roll-Off Container (SWMU 5) and Leaded Fuel UST (AOC A). Roll-off container is resting on concrete of former fuel station area. The leaded fuel pump can be seen approximately 10 feet to the right of the roll-off on the right edge of the photo.



Photo No.: 14  
Logbook Photo No.: 1-7  
Date: 12/16/97

Time: 1025  
Direction: N

Description: View of roll-off containers used to accumulate non-hazardous, industrial solid waste prior to off-site transport and disposal as solid waste.









# JOB BOOK

FROM PENINSULAR PUBLISHING

PROJECT NAME Altrachem VSI

PROJECT NUMBER G200/ROS-052

CREW Anthony Mubiru

DATE 12/16/97 BOOK # 1 OF 1

WEATHER \_\_\_\_\_

FIELD BOOK

16 PAGE

8 LEAVES

50% RAG

## CURVE FORMULAS

$$\begin{array}{l}
 T = R \tan \frac{1}{2} I \\
 T = \frac{50 \tan \frac{1}{2} I}{\sin \frac{1}{2} D} \\
 \sin \frac{1}{2} D = \frac{50}{R} \\
 \sin \frac{1}{2} D = \frac{50 \tan \frac{1}{2} I}{T}
 \end{array}
 \qquad
 \begin{array}{l}
 R = T \cot \frac{1}{2} I \\
 R = \frac{50}{\sin \frac{1}{2} D} \\
 E = R \text{ ex. sec } \frac{1}{2} I \\
 E = T \tan \frac{1}{4} I
 \end{array}
 \qquad
 \begin{array}{l}
 \text{Chord def.} = \frac{\text{chord}^2}{R} \\
 \text{No. chords} = \frac{1}{D} \\
 \text{Tan. def.} = \frac{1}{2} \text{ chord def.}
 \end{array}$$

The square of any distance, divided by twice the radius, will equal the distance from tangent to curve, very nearly.

To find angle for a given distance and deflection.

Rule 1. Multiply the given distance by .01745 (def. for 1° for 1 ft.) and divide given deflection by the product.

Rule 2. Multiply given deflection by 57.3, and divide the product by the given distance.

To find deflection for a given angle and distance. Multiply the angle by .01745, and the product by the distance.

## GENERAL DATA

RIGHT ANGLE TRIANGLES. Square the altitude, divide by twice the base. Add quotient to base for hypotenuse.

Given Base 100, Alt.  $10.10^2 \div 200 = .5$ .  $100 + .5 = 100.5$  hyp.

Given Hyp. 100, Alt.  $25.25^2 \div 200 = 3.125$ .  $100 - 3.125 = 96.875 = \text{Base}$ .

Error in first example, .002; in last, .045.

To find Tons of Rail in one mile of track: multiply weight per yard by 11, and divide by 7.

LEVELING. The correction for curvature and refraction, in feet and decimals of feet is equal to  $0.574 d^2$ , where  $d$  is the distance in miles. The correction for curvature alone is closely,  $\frac{1}{2} d^2$ . The combined correction is negative.

PROBABLE ERROR. If  $d_1, d_2, d_3$ , etc. are the discrepancies of various results from the mean, and if  $\sum d^2$  = the sum of the squares of these differences and  $n$  = the number of observations, then the probable error of the mean =  $\pm 0.6745 \sqrt{\frac{\sum d^2}{n(n-1)}}$

## MINUTES IN DECIMALS OF A DEGREE

	1'	2'	3'	4'	5'	6'	7'	8'	9'	10'
1	.0167	.0333	.0500	.0667	.0833	.1000	.1167	.1333	.1500	.1667
2	.0333	.0667	.1000	.1333	.1667	.2000	.2333	.2667	.3000	.3333
3	.0500	.0833	.1167	.1500	.1833	.2167	.2500	.2833	.3167	.3500
4	.0667	.1000	.1333	.1667	.2000	.2333	.2667	.3000	.3333	.3667
5	.0833	.1167	.1500	.1833	.2167	.2500	.2833	.3167	.3500	.3833
6	.1000	.1333	.1667	.2000	.2333	.2667	.3000	.3333	.3667	.4000
7	.1167	.1500	.1833	.2167	.2500	.2833	.3167	.3500	.3833	.4167
8	.1333	.1667	.2000	.2333	.2667	.3000	.3333	.3667	.4000	.4333
9	.1500	.1833	.2167	.2500	.2833	.3167	.3500	.3833	.4167	.4500
10	.1667	.2000	.2333	.2667	.3000	.3333	.3667	.4000	.4333	.4667

## INCHES IN DECIMALS OF A FOOT

	1"	2"	3"	4"	5"	6"	7"	8"	9"	10"	11"
1-16	.3125	.6250	.9375	1.2500	1.5625	1.8750	2.1875	2.5000	2.8125	3.1250	3.4375
.0032	.0078	.0156	.0234	.0312	.0391	.0469	.0547	.0625	.0703	.0781	.0859
.0833	.1667	.2500	.3333	.4167	.5000	.5833	.6667	.7500	.8333	.9167	1.0000

①

0910: Arrived at Altheaen facility with Mr. Kevin Higgins of Teel Law, Inc. Made met by Mr. Edmonds of Altheaen, Inc.

0915: Kevin outlines <sup>the</sup> Teel Law team's purpose for visiting Altheaen's facility.

0917: Mr. Edmonds on receiving hazardous wastes before or after June in 1987  
Never, ever have.

0918: Mr. Edmonds on activities regulated at facility: \* Storage operations in 1981?

- \* Original permit issued in 1969
- \* Selling oil & high explosives,
- \* Only regulated activity is transport-alum
- \* Finger print samples of all incoming & outgoing workers.

Am, 12/16/97



(2)

0920: Mr. Edmonds on Altracem's

generator (of waste) & materials  
(of waste) status as per  
facility's completion of EPA's  
Notification of Waste Activity

Forms:

\* Altracem was anticipating (at the  
time it completed the forms) to  
participate in a joint venture to  
operate as a waste-as-a-fuel  
(burning waste oil) processor.  
However, the joint venture fell  
through.

0935: Mr. Edmonds on materials they

receive:

\* Only (material) receive  
Special waste from Special  
waste generators as defined by  
the Illinois EPA,  
\* Allowed by their (Altracem's)  
IEPA Permit to receive non-  
hazardous oils.

Am, 12/16/97

(3)

0940:

0958: Began facility walk-around.  
led by Mr. Edmonds.

1005: Mr. Edmonds on Altracem

premises:

\* 4,800 sq. ft → originally leased  
this space from  
Mr. Crandner.

Approx. breadth 125 ft

depth

\* 2.8 acres → Bought after Nov. 88  
(after the fire).  
length is 325 ft  
currently bldg a new  
unit.

\* Original purpose of the  
premises was as a boundary.  
Boundary closed in 1960 → Bought  
by Crandner → Edmonds leaves  
4,800 sq. ft portion → two in  
1987 → Edmonds buys the other



Mr. Edmonds on Post boundary (4)  
1016: D&E gave them a clean  
bill of health.

Photo 1 (Roll 1), Facing North, 1011

Every drum has a job #. This is  
kept in the tracking system.

\* View of non-hazardous waste  
containers (labelled) that  
are kept in the storage  
in the uncovered structure next  
to the office bldg. The containers  
(55 gal, metal & plastic drums)  
rest on wooden flat forms under  
in turn, rest on concrete  
flooring.

Photo 2, Facing East, 1015

View of bulking facility (unit)  
The feed container on the roll-off box.

Photo 3:

1017

View facing west of waste  
drums. Roll-off unit is the  
roll-off box. Office bldg is  
in the background.

Photo 4:

1028

View facing west of waste  
drum storage area.

Photo 5:

1022

View facing north of filled  
isolate drums. The tanks in the  
background will be used  
for wastewater processing.

Photo 6:

1025

View facing north of another  
roll-off box next to the filled  
isolate drums. Waste water tank  
to the left.

(6)

Photo 7

1028

View facing north of 20 yd containers used for holding corrugated cardboard boxes.

Photo 9

1034

View facing west of gateway of the facility's drum storage area.

Right - filled drums  
Left - Empty drums

Background to the right - Empty tanks to be used for wastewater treatment (see photo 5)

Photo 9

1032

View facing east of Scrap metal container.

1035: Inspected garage area!

(7)

1045: Completed bail log inspection, returned to Mr. Edmunds office.

\* Kevin Higgins addressed information needs issue  
\* Mr. Edmunds provided copies of documents

1108: Mr. Edmunds, re:

Process overview (of tracking system)

Interviewing  
A Sampled waste stream → Attribution given each sample (see stream #s)  
(Re-acceptance waste stream)

Assigns stream #s like job #s

Waste stream #, waste codes, quantity, hauler info etc...

1115: Completed wrap-up meeting.

Stop #815 / 726-8666

1140: Left facility premises with Kevin Higgins

Jan, 11/16/97



Kevin Higgins



# JOB BOOK

FROM PENINSULAR PUBLISHING

PROJECT NAME Altrachem vsI

PROJECT NUMBER G200/P05-052

CREW Anthony Mubiru, Kevin Higgins

DATE 12/16/97 BOOK # 2 OF 2

WEATHER \_\_\_\_\_

FIELD BOOK

16 PAGE

8 LEAVES

50% RAG

## CURVE FORMULAS

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 \sin \frac{1}{2} D = \frac{50}{R} & E = R \text{ ex. sec } \frac{1}{2} I & \text{Tan. def.} = \frac{1}{2} \text{ chord def.} \\
 \sin \frac{1}{2} D = \frac{50 \tan \frac{1}{2} I}{T} & E = T \tan \frac{1}{2} I & 
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The square of any distance, divided by twice the radius, will equal the distance from tangent to curve, very nearly.

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Given Hyp. 100. Alt.  $25.25^2 \div 200 = 3.125$ .  $100 - 3.125 = 96.875 = \text{Base}$ .

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To find Tons of Rail in one mile of track: multiply weight per yard by 11, and divide by 7.

LEVELING. The correction for curvature and refraction, in feet and decimals of feet is equal to  $0.574 d^2$ , where  $d$  is the distance in miles. The correction for curvature alone is closely,  $\frac{1}{2} d^2$ . The combined correction is negative.

PROBABLE ERROR. If  $d_1, d_2, d_3$ , etc. are the discrepancies of various results from the mean, and if  $\Sigma d^2$  = the sum of the squares of these differences and  $n$  = the number of observations, then the probable error of the mean =  $\pm 0.6745 \sqrt{\frac{\Sigma d^2}{n(n-1)}}$

## MINUTES IN DECIMALS OF A DEGREE

	1'	11'	21'	31'	41'	51'	61'	71'	81'	91'	100'
1	.0167	.1833	.3500	.5167	.6833	.8500	.0167	.1833	.3500	.5167	.6833
2	.0333	.2000	.3667	.5333	.7000	.8667	.0333	.2000	.3667	.5333	.7000
3	.0500	.2167	.3833	.5500	.7167	.8833	.0500	.2167	.3833	.5500	.7167
4	.0667	.2333	.4000	.5667	.7333	.9000	.0667	.2333	.4000	.5667	.7333
5	.0833	.2500	.4167	.5833	.7500	.9167	.0833	.2500	.4167	.5833	.7500
6	.1000	.2667	.4333	.6000	.7667	.9333	.1000	.2667	.4333	.6000	.7667
7	.1167	.2833	.4500	.6167	.7833	.9500	.1167	.2833	.4500	.6167	.7833
8	.1333	.3000	.4667	.6333	.8000	.9667	.1333	.3000	.4667	.6333	.8000
9	.1500	.3167	.4833	.6500	.8167	.9833	.1500	.3167	.4833	.6500	.8167
10	.1667	.3333	.5000	.6667	.8333	1.0000	.1667	.3333	.5000	.6667	.8333

## INCHES IN DECIMALS OF A FOOT

	1-16	3-32	1-8	3-16	1-4	5-16	3-8	7-16	1-2	5-8	3-4	7-8	1-1
1	.0032	.0078	.0104	.0156	.0208	.0260	.0313	.0417	.0521	.0625	.0729	.0833	.0937
2	.0067	.0156	.0208	.0313	.0417	.0521	.0625	.0729	.0833	.0937	.1042	.1146	.1250
3	.0104	.0208	.0313	.0417	.0521	.0625	.0729	.0833	.0937	.1042	.1146	.1250	.1354
4	.0156	.0313	.0417	.0521	.0625	.0729	.0833	.0937	.1042	.1146	.1250	.1354	.1458
5	.0208	.0417	.0521	.0625	.0729	.0833	.0937	.1042	.1146	.1250	.1354	.1458	.1562
6	.0260	.0521	.0625	.0729	.0833	.0937	.1042	.1146	.1250	.1354	.1458	.1562	.1667
7	.0313	.0625	.0729	.0833	.0937	.1042	.1146	.1250	.1354	.1458	.1562	.1667	.1771
8	.0365	.0729	.0833	.0937	.1042	.1146	.1250	.1354	.1458	.1562	.1667	.1771	.1875
9	.0417	.0833	.0937	.1042	.1146	.1250	.1354	.1458	.1562	.1667	.1771	.1875	.1979
10	.0469	.0937	.1042	.1146	.1250	.1354	.1458	.1562	.1667	.1771	.1875	.1979	.2083
11	.0521	.1042	.1146	.1250	.1354	.1458	.1562	.1667	.1771	.1875	.1979	.2083	.2188
12	.0573	.1146	.1250	.1354	.1458	.1562	.1667	.1771	.1875	.1979	.2083	.2188	.2292
13	.0625	.1250	.1354	.1458	.1562	.1667	.1771	.1875	.1979	.2083	.2188	.2292	.2396
14	.0677	.1354	.1458	.1562	.1667	.1771	.1875	.1979	.2083	.2188	.2292	.2396	.2500
15	.0729	.1458	.1562	.1667	.1771	.1875	.1979	.2083	.2188	.2292	.2396	.2500	.2604
16	.0781	.1562	.1667	.1771	.1875	.1979	.2083	.2188	.2292	.2396	.2500	.2604	.2708
17	.0833	.1667	.1771	.1875	.1979	.2083	.2188	.2292	.2396	.2500	.2604	.2708	.2812
18	.0885	.1771	.1875	.1979	.2083	.2188	.2292	.2396	.2500	.2604	.2708	.2812	.2916
19	.0937	.1875	.1979	.2083	.2188	.2292	.2396	.2500	.2604	.2708	.2812	.2916	.3020
20	.0989	.1979	.2083	.2188	.2292	.2396	.2500	.2604	.2708	.2812	.2916	.3020	.3125

Purpose of Visit  
Agenda—Tour of facility (Process Health and safety Facility History Additional Info—Manifests, MSDs

## SUMMARY

- ① Shred-Pax shredder
- ② Drum Container Storage Area
- ③ Waste Oil Storage Tanks (2)
- ④ Drum Dumper (4,800 gallons)
- ⑤ Special Waste Treatment System:

Receiving Tanks (2)  
Mixing Vessel (1)  
Fly Ash Storage Silo w/ Baghouse  
Poll-off Box

## AOCs

- ① Piping + Liquid Collection System

Data Needs { Location  
Description (materials/dimensions)  
Period of operation  
waste  
History of Releases  
Release Controls  
12/16/19



12/16/97

William H. Edmonds  
0905 - Willie Edmonds - opened building,  
met w/ Mr. Edmonds concerning  
VSI purpose

- Facility has never received hazardous waste or has never shipped hazardous waste from the facility.
- All material is kept is tested prior to receiving  
started opening <sup>1984 Developmental</sup> ~~opening~~ Operating August 6, 1982
- Permit for rolling oils, naphtha
- All material is tested after any processing takes place (before it is shipped off-site)
- Submitted Application for hazardous waste activity (Received <sup>1981</sup> Jan 31, 1986)
- Submitted Reapplication for hazardous waste activity (Received <sup>1981</sup> Nov. 14, 1986)
- Facility has manifests and analytical data for all material that is received

12/16/97

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12/16/97

12/16/97

REN 12/16/97

It appears that the facility is operating entirely outside of RCRA corrective action authority within Region II. The facility has requested to be removed from IL and Fed. Haz waste generator list.

- 1000 - Tour of facility
- Prior to fire - 4,000 sq. ft
- After fire, Attraction bought the facility site (2.8 acres) in Nov. '88

- Currently constructing building
- Only 2 people work here
- 1960 - Originally the facility site was a foundry which went out of business in 1960; DOE sampled the facility and is formally closed
- Drums are labeled w/ John Numbers
- Some waste is off-spec boxed or drummed waste
- Wastewater tanks were removed - Ren destroyed in the fire

REN  
12/16/97



12/16/97  
RCH

- 1030 - Top of facility
- Currently 400 drums; Permit capacity is 990 drums
- Bulking is only material process since 1987
- Ozinga Transportation Systems, Inc. Matteson, IL
- Landon Lakes 122nd and Torrance Landfill Chicago, IL
- 5,000<sup>RCH</sup> 20 cy rollovers per month of bulking material
- No vsts on site; All KSTs on site before the fire;
- Empty drums go to recycler; Approx. 300 empty drums per month;
- Over pack drums are visible - transporters sometimes require this
- Solid waste dumpsters; cardboard boxes from off-spec. materials
- Scrap metal sent - off site for recycling
- No sampling was required after fire; all debris went off-site after the fire (manifested)
- Maintenance building on-site - used only for equipment repair

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RCH



LRH 12/16/97

10:45

← All supplies except for drum

container storage area are offsite after Jan. 13, 1987 Fire -

- All material must have analytical data to be received by Attachment under their permit
  - Material is qualitatively checked when received - known as the "Pre-Waste Stream Approval" waste is tracked w/ approval code and a tracking number
  - 1115 removed manifest material
    - all off-spec material is also non-hazardous; sometimes MSDs are used
  - Copies of manifest for incoming, outgoing; analytical for incoming
- [ facility site length is 325' width is 123' ]
- 1/40 - left site

LRH  
12/16/97